

# HEALTH HIGHLIGHTS

NEWS FROM CHILDREN'S MEMORIAL HERMANN HOSPITAL WINTER/SPRING 2010

## FOR PARENTS

## New children's sleep lab helps kids (and parents) rest easy

**G**etting sufficient sleep is important for kids. During sleep, your child's brain forms crucial connections, and his or her body releases an important growth hormone.

While occasional bad dreams or small bedtime battles are normal, more severe, ongoing sleep problems are a concern. That's why the new sleep lab just for kids at Children's Memorial Hermann Memorial City is good news for parents.

"The lab offers state-of-the-art technology in a child-friendly environment," says Denise Taylor, R.R.T., director of sleep services. "We follow the guidelines of the American Academy of Sleep Medicine – the gold standard in the field," she says.

### Sleep Stealers

Common sleep disorders that are diagnosed and treated at the lab include:

■ **Sleep apnea** – This disorder occurs when soft tissue at the back of the throat partially blocks the airway during sleep, causing little pauses in breathing. In children, the problem often results from swollen tonsils and adenoids.

■ **Sleepwalking** – This disorder involves walking around while sound asleep. Sleepwalking kids may get into dangerous situations or even leave the house. Some also talk or act aggressively in their sleep.

■ **Night terrors** – These episodes are more than ordinary nightmares. Kids may scream, thrash around or look terrified. It's often hard to wake them up, which can be disturbing for everyone.

Some sleep disorders in kids are easy to spot, but others are less obvious. Warning

signs include frequent snoring and very restless sleep. During the day, kids with sleep problems may have trouble paying attention or may seem hyperactive.

### Sweet Dreams

At the sleep lab, doctors can observe your child's sleep in a comfy, carefully controlled environment. They can also monitor your child's breathing, heart rate and brainwaves.

Once a problem has been diagnosed, our sleep specialists can prescribe an appropriate treatment. Possible options include behavioral therapy and medication. For children with sleep apnea, surgery to remove enlarged tonsils and adenoids is sometimes advised.

At the sleep lab, we don't just tell your child, "good night, sleep tight." We help make it happen. ■

**Think your child might have a sleep disorder? Ask your pediatrician about a referral to the sleep lab. Or call 713.242.4447 to set up an initial evaluation by one of our sleep specialists.**



## Healthy Teeth Start at Home

By about age 2, many children want to brush their own teeth. Give them a toothbrush designed for kids. Be sure they brush twice a day.

“Until children are 7 to 10 years old, you need to help them brush,” says James Wilson, M.D., oral and maxillo-facial surgeon affiliated with Children’s Memorial Hermann Hospital and assistant professor of oral and maxillofacial surgery at The University of Texas Dental Branch at Houston. “Once their teeth are touching each other, you should help children floss once a day,” he adds.

Here are some tips:

1. Use only a little toothpaste – the size of a pea.
2. Hold the toothbrush at an angle against the child’s gums. Gently move the brush in small circles and short back-and-forth strokes.
3. Brush the outside, inside and the chewing surface of the teeth. Brush for three minutes.
4. Have the child spit out the toothpaste and rinse.
5. Tear off a long piece of floss. Wrap each end around the middle finger of one hand.
6. Hold the floss between the thumbs and first fingers. Gently slide the floss down between the child’s teeth. Rub the floss against the sides of each tooth.

**Brush up on your dental know-how! Visit [childrensmemorialhermann.org](http://childrensmemorialhermann.org) and select Health Information. From there you can search under “D” in the Health Encyclopedia A-Z for more family dental care tips.**



## Helping kids tune in to the benefits of music therapy

Since Children’s Memorial Hermann Hospital started its music therapy program in March 2009, hospitalized children have discovered what ancient Greek philosophers believed to be true: that music could help heal the body and soul.

“Music improvisation helps children express their feelings,” says music therapist Christine Neugebauer, M.T.-B.C., who joined the Children’s Memorial Hermann Hospital staff last spring after 15 years of service at Shriners Burn Hospital in Galveston. “It’s spontaneous, creative and free and doesn’t require preparation, practice or previous musical experience. There is no right or wrong way to play music when it’s used to express feelings.

“Music is a wonderful therapeutic tool because it’s processed in several areas of the brain. It has connections with the brain’s speech and language areas, as well as with motor areas,” she says. “It also connects with our emotional center, allowing us to express what we can’t easily put into words.”

Clinical studies support the value of music therapy, suggesting that it can affect brain waves, brain circulation and stress hormones. It has been used as a rehabilitation tool to improve movement, muscle control, mood and motivation. Some studies suggest that music therapy may help decrease the overall intensity of pain when combined with pain

medications. Other studies have shown that music therapy:

- Lowers heart rate, blood pressure and breathing rate
- Positively affects insomnia, depression and anxiety
- Helps with speech and communication

Candidates for music therapy are carefully selected based on their health status, emotional issues and the likelihood that they will respond to the therapy.

“One of our recent patients was neurologically disoriented and not responding to her environment,” says Neugebauer. “When she started strumming my guitar, it helped her organize her brain in ways that allowed her to respond.” Another patient, a 9-year-old girl on dialysis, wrote a rap song about being on the waiting list for a kidney transplant and choreographed a “kidney dance.”

Neugebauer and Richard Weir, director of the Child Life program at Children’s Memorial Hermann Hospital, are looking to grow the music therapy program. “We’re also exploring other expressive therapies – art, prose, poetry, whatever captures our patients’ interest and allows them to express their feelings,” Weir says. ■

**Learn more about music therapy and the Child Life program by visiting [childrensmemorialhermann.org](http://childrensmemorialhermann.org).**

# Obese kids face adult health problems

**B**y now you know about the growing problem of childhood obesity. According to the American Heart Association (AHA), nearly one out of every three children and adolescents is overweight or obese. In addition to causing increased rates of type 2 diabetes, this epidemic is causing dire health issues among our nation's children – problems that once affected only adults.

## The Problems of Obesity

Doctors have long known that obesity puts people at risk for multiple health problems. But it was commonly thought those problems affected only adults. This is no longer the case, as more and more doctors are seeing the following conditions in their young obese patients:

■ **High blood pressure:** In a study of 5,000 children, 5 percent had high blood pressure – and the strongest risk factor was obesity. Uncontrolled high blood pressure can cause heart disease and stroke.

■ **High cholesterol:** Ten percent of kids ages 2 to 19 have total blood cholesterol levels greater than 200 mg/dL, the upper limit of the recommended range. High cholesterol increases heart attack risk.

■ **Metabolic syndrome:** This is a group of risk factors that increase the chances for several serious conditions, including heart disease, diabetes and stroke. Researchers found that as many as 50 percent of severely obese adolescents have metabolic syndrome.

■ **Plaque buildup:** According to the AHA, plaque buildup in the neck arteries of obese children is similar to levels found in middle-aged adults. Plaque is a substance that forms along the walls of arteries, increasing the risk for heart attack and stroke.

In addition to these potentially life-threatening problems, obese children may face a greater risk of developing

anxiety and depression by the time they reach middle school. They also may be more likely to get migraine headaches.

## Help Your Child Be a Kid

These trends are clear evidence that kids need to manage their weight. Ask your pediatrician if your child's weight is in a healthy range. If not, these tips can help:

- Serve healthy foods and control portion size.
- Enjoy regular family meals.
- Encourage physical activity.
- Limit time spent in front of the TV or computer.
- Set a good example by eating well and being active. ■

**Concerned about your child's weight? Pediatric health experts affiliated with Children's Memorial Hermann Hospital can help. Call the UT Pediatric Weight Management Clinic at 832.325.6516.**

## classic macaroni and cheese

Here's a lower-fat version of a true family classic.

2 cups **macaroni**  
½ cup **onions**, chopped  
½ cup evaporated **skim milk**  
1 medium **egg**, beaten  
¼ tsp **black pepper**  
1¼ cup (4 oz) low-fat **sharp cheddar cheese**, finely shredded  
As needed: nonstick **cooking spray**

1. Cook macaroni according to directions – but do not add salt to the cooking water. Drain and set aside.
2. Spray casserole dish with nonstick cooking spray.
3. Preheat oven to 350° F.
4. Lightly spray saucepan with nonstick cooking spray. Add onions to saucepan and sauté for about three minutes.

5. In another bowl, combine cooked macaroni, onions and rest of the ingredients, and mix thoroughly.
6. Transfer mixture into casserole dish.
7. Bake for 25 minutes or until bubbly. Let stand for 10 minutes before serving.

**Serving size:** ½ cup **Yield:** eight servings  
**Nutritional analysis (per serving):** 200 calories, 4 g total fat, 2 g saturated fat, 34 mg cholesterol, 120 mg sodium, 1 g total fiber, 11 g protein, 29 g carbohydrates, and 119 mg potassium.

## Raising Awareness of Mitochondrial Diseases

Mitochondria are small oval-shaped structures that are our cells' "power plants." Problems with mitochondrial function can cause a variety of symptoms in children, including developmental delay, nerve damage, muscle weakness, seizures, stroke and multiple organ failure.

Mitochondrial diseases are complex and difficult to identify. In collaboration with Children's Memorial Hermann Hospital, the Neurometabolic and Mitochondrial Clinic at The University of Texas Medical School at Houston is the only facility in the state with expertise in diagnosing and treating mitochondrial disorders.

To raise awareness of mitochondrial diseases, the Houston chapter of the United Mitochondrial Disease Foundation (UMDF) is hosting its fourth annual Christopher's Heart Fun Run on Saturday, Feb. 6, at Sam Houston Park. The 8 a.m. event will also feature a 5K wheelchair race and a 1-mile walk/run for children. All proceeds from the event will fund research on mitochondrial diseases.

**Ready to run for a good cause? Register now by visiting [www.umdff.org/christophersheartfunrun](http://www.umdff.org/christophersheartfunrun).**

**Children's Memorial Hermann Hospital**  
6411 Fannin, Houston, Texas 77030. Call **713.704.KIDS (5437)**.

## Amy makes a fast comeback

**M**ark remembers the morning his daughter Amy called from Mexico, where she was visiting her grandmother, and proudly announced that she'd learned to ride a four-wheeler.

"Amy likes to try new things, but I had a bad feeling," Mark remembers.

It was 5 p.m. when Mark got a call from an emergency clinic in Mexico. Thrown from the four-wheeler, Amy had suffered extensive injuries, including two fractures of the left jaw, hairline fractures of the nose and pelvis and a lacerated spleen.

After the emergency physician in Mexico had ruled out bleeding in the brain, Amy was released and flew home to Houston. Her father immediately took her to Children's Memorial Hermann Hospital.

At the Children's Emergency Center, Amy was seen by David Wainwright, M.D., a plastic and reconstructive surgeon affiliated with Children's Memorial Hermann Hospital and a professor in the division of Plastic and Reconstructive Surgery at The University of Texas Medical School at Houston. "Amy had a lot of facial trauma and swelling, and her upper and lower teeth weren't fitting together properly."

Dr. Wainwright wired Amy's teeth together to stabilize the jaw, but an X-ray later showed that the jawbone was separating. Two more surgeries followed to further stabilize the jaw.



**Amy, post-recovery**

"Once her jaw was stable, our main emphasis was mobilizing the jaw and getting her back on a normal diet," Dr. Wainwright says. "At our last follow-up visit, her teeth were fitting together well and the jaw was functioning normally."

Amy's other injuries healed over time. Today, she's participating in softball, volleyball and swimming.

"With all of Amy's injuries, we saw a lot of doctors at Children's Memorial Hermann Hospital," Mark says. "Through it all, we had the very best care." ■

**The Galtney Trauma and Emergency Center is the only certified Level I pediatric trauma center in the Gulf Coast region, offering the highest level of trauma care available. Visit [childrensmemorialhermann.org](http://childrensmemorialhermann.org) to learn more about our advanced emergency services.**